

CORNELL UNIVERSITY  
THE SCHOOL OF EDUCATION



1944-45

PUBLISHED BY THE UNIVERSITY  
ITHACA, NEW YORK

# The University Calendar for 1944-45

1944

## SUMMER TERM

- July 3, *Monday*, Registration, Navy students.  
July 4, *Tuesday*, Registration, civilian students.  
July 5, *Wednesday*, Instruction begins at 8 A.M.  
July 27, *Thursday*, Last day for the payment of tuition for the Summer Term.  
Oct. 24, *Tuesday*, Instruction ends at 4 P.M.

## FALL TERM

- Nov. 1, *Wednesday*, Registration, civilian students.  
Nov. 2, *Thursday*, Registration, Navy students.  
Nov. 3, *Friday*, Instruction begins at 8 A.M.  
Nov. 23, *Thursday*, Last day for the payment of tuition for the Fall Term.  
Dec. 25, *Monday*, Christmas, a holiday.

1945

- Feb. 22, *Thursday*, Instruction ends at 4 P.M.

## SPRING TERM

- March 2, *Friday*, Registration, Navy students.  
March 3, *Saturday*, Registration, civilian students.  
March 5, *Monday*, Instruction begins at 8 A.M.  
March 29, *Thursday*, Last day for the payment of tuition for the Spring Term.  
June 23, *Saturday*, Instruction ends at 12:50 P.M.

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## SCHOOL OF EDUCATION

### FACULTY

- EDMUND EZRA DAY, Ph.D., LL.D., President of the University.  
GEORGE HOLLAND SABINE, Ph.D., LL.D., Vice President of the University.  
HOWARD R. ANDERSON, Ph.D., Director of the School of Education and Professor of Education (Teaching of the Social Studies).  
ROLLAND M. STEWART, Ph.D., Head, Department of Rural Education and Professor of Rural Education (Agricultural Education).
- 

- THOMAS L. BAYNE, JR., Ph.D., Assistant Professor of Rural Education (Educational Psychology and Measurement).  
CORA E. BINZEL, M.S., Professor of Rural Education (Home Economics Education).  
JULIAN EDWARD BUTTERWORTH, Ph.D., Professor of Rural Education (Educational Administration).  
THEODORE H. EATON, Ph.D., Professor of Rural Education, Emeritus.  
LEWIS ELDRED, Ph.D., Chairman of the Bureau of Educational Service and Assistant Professor of Education (on leave).  
EMMA ROSE ELLIOTT, B.S., Instructor in Rural Education (Home Economics Education).  
LYNN A. EMERSON, Ph.D., Professor of Industrial Education.  
EMERY N. FERRISS, Ph.D., Professor of Rural Education (Secondary Education and Curriculum).  
FRANK S. FREEMAN, Ed.D., Professor of Education (Educational Psychology).  
EVA GORDON, M.S., Instructor in Rural Education (Nature Study).  
———, Instructor in Rural Education (Agricultural Education).  
ALFRED H. GROMMON, Ph.D., Instructor in Education (Teaching of English).  
MABEL A. HASTIE, M.S. in Ed., Instructor in Rural Education (Home Economics Education).  
EDWIN R. HOSKINS, Ph.D., Associate Professor of Rural Education (Agricultural Education).  
M. LOVELL HULSE, Ph.D., Associate Professor of Education (Secondary Education).  
MARGARET HUTCHINS, Ph.D., Associate Professor of Rural Education (Home Economics Education).  
PHILIP G. JOHNSON, Ph.D., Assistant Professor of Education (Teaching of Science).  
RIVERDA H. JORDAN, Ph.D., Professor of Education, Emeritus.  
PAUL J. KRUSE, Ph.D., Professor of Rural Education (Educational Psychology).  
JOHN A. MACK, M.S., Instructor in Rural Education (Agricultural Education).

- CLYDE B. MOORE, Ph.D., Professor of Rural Education (Elementary Education and Supervision).
- ROY A. OLNEY, Ph.D., Associate Professor of Rural Education (Agricultural Education).
- E. LAURENCE PALMER, Ph.D., Professor of Rural Education (Nature Study).
- HAROLD J. PALMER, A.B., Instructor in Rural Education and Acting Chairman of the Bureau of Educational Service.
- ANNA Y. REED, Ph.D., Lecturer in Guidance and Personnel, School of Education.
- WILLIAM A. SMITH, Ph.D., Associate Professor of Rural Education (Agricultural Education).
- FLORA M. THURSTON, M.A., Professor of Home Economics Education.
- CATHERINE WELCH, M.A., Instructor in Education (Teaching of French).
- ANDREW L. WINSOR, Ph.D., Professor of Rural Education (Personnel Administration).
- ASAHEL D. WOODRUFF, Ph.D., Instructor in Rural Education (Educational Psychology).

#### REPRESENTATIVES OF ACADEMIC GROUPS

- W. C. BALLARD, JR., Ph.D., Professor of Electrical Engineering (1944).
- C. W. DEKIEWIET, Ph.D., Professor of Modern European History (1944).
- J. A. HARTELL, Ph.D., Associate Professor of Architecture (1944).
- JAMES HUTTON, Ph.D., Professor of the Classics (1945).
- M. L. NICHOLS, Ph.D., Professor of Chemistry (1944).
- C. E. PALM, Ph.D., Professor of Entomology (1944).
- J. F. RANDOLPH, Ph.D., Assistant Professor of Mathematics (1944).
- C. W. JONES, Ph.D., Associate Professor of English (1945).
- JESSIE RHULMAN, Ed.D., Associate Professor of Home Economics (Student Counselor). (1946).
- S. W. WARREN, Ph.D., Professor of Farm Management and Investigator in Farm Management in the Experiment Station. (1946).

#### ASSISTANTS, 1943-44

- ELLIS B. CLOUGH, M.S. Ag. Ed., Assistant in Agricultural Education.
- HELEN C. COLE, M.A., Assistant in Social Studies Education.
- LEE R. CRANE, M.S. in Ed., Assistant in Agricultural Education.
- EDNA DRILL, M.S., Research Assistant in Rural Education.
- ROBERT I. EVERINGHAM, B.S., Assistant in Agricultural Education.
- FELIX A. NYLUND, M.S., Assistant in Agricultural Education.
- HUBERT L. RHODES, B.S., Assistant in Agricultural Education.
- GENEVA K. RIEMER, M.S., Assistant in Human Growth and Development.
- SHIRLEY SMITH, B.S. in Ed., Assistant in Rural Education.
- JEANNETTE TOLHURST, B.S., Assistant in Science Education.
- ADELAIDE C. VAGNARELLI, M.A., Assistant in Social Studies Education.
- KENNETH D. WELLS, M.S. in Ed., Assistant in Agricultural Education.
- COURTNEY D. YOUNG, B.S., Assistant in Science Education.



## COOPERATING TEACHERS IN THE ITHACA HIGH SCHOOLS, 1943-44

BERTHA M. BARTHOLOMEW  
FRANK R. BLISS  
MILDRED BRANDAUR  
MAYFRED CLAPLIN  
JOSEPHINE CONLON  
CATHERINE GRADY  
OSWALD LAUBENSTEIN

KATHRYN E. MCCLARTY  
M. ISABEL MURRAY  
A. S. RABOTNIKOFF  
MARGARET REIDY  
BEATRICE M. SHUFELT  
JANE STOUTENBERG  
FREDERICK H. STUTZ

MARIAN WARREN

# School of Education

## DEVELOPMENT AND FUNCTIONS

Courses in Education at Cornell University were first offered through the College of Arts and Sciences in 1888. In the College of Agriculture, the Department of Rural Education was established in 1914 when a program in agricultural education was initiated as a supplement to certain offerings in rural education and nature study that had been available for several years.

As a means of integrating the activities in teacher education in the endowed and state colleges of the University, the Graduate School of Education was established in 1931. During the past decade several important steps have been taken: a five-year program for the preparation of secondary school teachers of academic subjects, of agriculture, and of home economics has been established, and programs in industrial arts, industrial education, art education, guidance, and administrative leadership have been initiated. In 1940 the name was changed to the School of Education primarily because of the increasing attention given to the professional curricula for which the School is responsible.

The School of Education as a University unit of organization assumes the responsibility for planning and administering, under the jurisdiction of the Graduate School of the University, professional programs leading to the degrees of M.Ed. and M.S. in Ed. and for giving instruction in the professional subjects. The former degree is given upon completion of the five-year program for the preparation of secondary school teachers. (See pp. 20-30.) The latter degree is granted upon completion of special programs for the preparation of principals, superintendents, counselors, and similar officers. These programs are professional in the sense that they are designed to prepare persons for the practice of a profession.

In addition, the staff members, working through the Graduate School, give instruction and direct research in those phases of Education in which they are especially proficient. These programs usually lead to Master's degrees other than the professional ones or to the Ph.D. degree. Although these two functions of professional instruction and scholarship may be recognized as different, they are, of course, interrelated. Professional practice frequently provides the

problems about which scholarly activities are organized; the results of these scholarly activities are obviously of profound significance in professional practice.

## INFORMATION REGARDING

### ADVANCED DEGREES

1. The degrees of Master of Arts, Master of Science, and Doctor of Philosophy are administered directly by the Graduate School of Cornell University.

2. The degrees of Master of Education and Master of Science in Education are administered directly by the School of Education, under the jurisdiction of the Graduate School.

*For detailed information regarding all advanced degrees, except the professional degrees of Master of Education and Master of Science in Education, consult the Announcement of the Graduate School.*

### ADMISSION

Students may be admitted to the Graduate School in one of the following three classes:

- (1) Resident Doctors;
- (2) Graduate students not candidates for degrees: "non-candidates";
- (3) Candidates for degrees.

Applications for admission, made on the proper forms, should be filed in the office of the Graduate School at the earliest possible date and, ordinarily, not later than August 10 and January 25 for entrance to the first and second terms, respectively; and not later than June 1, if possible, for entrance to the Summer Session.

An applicant who is not a graduate of Cornell University must submit complete official transcripts of all previous college studies.

To be admitted to the Graduate School, either as a non-candidate or as a candidate for a degree an applicant (1) must have received his baccalaureate degree from a college or university of recognized standing or have done work equivalent to that required for such degree; (2) as judged by his previous scholastic record, or otherwise, must show promise of ability satisfactorily to pursue advanced study and research; and (3) must have had adequate previous preparation in his chosen field of study to enter at once upon graduate study in that field.

Seniors in the colleges of Cornell University who have completed the academic requirements for the Bachelor's degree, and who qualify under (2) and (3), may, subject to the approval of the deans of their respective colleges, be admitted to the Graduate School.

*Resident Doctors:* Persons who hold the Doctor's degree or who have equivalent standing may, subject to permission from the Dean, be admitted to the Graduate School as Resident Doctors, for the purpose of engaging in advanced study and research in a field in which they have had adequate previous preparation. On the recommendation of the Dean, Resident Doctors are exempt from the payment of tuition and all fees except laboratory charges. Resident Doctors ordinarily are not permitted to attend classes.

*Graduate Students Not Candidates for Degrees:* Students admitted to the Graduate School usually pursue a course leading to one of the advanced degrees; but a properly qualified person who, for special reasons, does not wish to meet the requirements for a degree may be admitted to the Graduate School as a "non-candidate" and arrange a program of graduate study suitable to his purposes. *For further information, consult the Announcement of the Graduate School.*

#### RESIDENCE

No student will be awarded any degree by Cornell University unless he has spent at least one full academic year, or the equivalent, in residence and study at the University as a candidate for that degree.

#### THE SPECIAL

##### COMMITTEE

The work of each graduate student is in charge of a Special Committee. After the student has chosen his major and minor subjects, he must select one or more members of the faculty to represent each subject or field and to serve as the members of his Special Committee, the representative of his major subject being the chairman.

#### THE PROFESSIONAL DEGREES IN EDUCATION

Two professional degrees are offered, namely, Master of Education and Master of Science in Education. The former degree is granted upon the completion of a program of pre-service preparation for secondary school teaching; the latter, of a program for the preparation of special



school officers. The programs leading to these degrees shall include such courses, seminars, projects, and investigations of an advanced or graduate nature as will develop ability to perform acceptably the professional duties required of the several types of educational workers.

*General Regulations Governing Both Degrees:*

1. Under the general administration of the Director, the candidate shall choose two or more members of the Graduate Faculty as a Special Committee to direct his work. The Special Committee of a candidate for the degree of Master of Education should include a representative from the student's teaching field. The Special Committee of a candidate for the degree of Master of Science in Education may include a faculty member representing a field other than Education. In each case the Chairman shall be a member of the Education staff.

2. The office of the School of Education acts as an office of record, and the candidate for a degree shall, within ten days of his registration, file in writing a statement approved by his committee showing his plan of work and course of study.

3. The maximum period allowed for the completion of all requirements shall conform to the regulations of the Graduate School.

4. Prior to scheduling the final examination, each member of the Education staff under whom the candidate has had instruction shall be informed of the proposed examination, shall be asked to express an opinion regarding the candidate's fitness for such examination, and shall be invited to be present and to take part in the examination.

*The Degree of Master of Education.* The program for this degree is planned for students seeking *pre-service* preparation for teaching in the secondary school. There may be two types of candidates for this degree, as follows:

1. Those who, early in their University work, make definite plans whereby preparation for teaching may be carried through the four undergraduate years and a fifth year of advanced professional study. The general pattern for this five-year program is presented on page 20.

2. Those who wish to prepare for teaching even though they may have secured little or no professional training during their undergraduate years. Such persons may normally earn the degree by following a continuous program involving one summer session and the fifth year. The pre-professional and professional subjects shall be those included in the program outlined on page 20.

*Note:* The attention of *experienced* teachers is directed to the opportunity that exists under Plan B of the M.A., M.S., and M.S. in Agr. degrees to secure, through a flexible program, additional preparation for secondary school teaching.

*The Degree of Master of Science in Education.* The various programs leading to this degree are planned primarily for those who, having had experience in teaching or other type of educational work, wish to prepare themselves for such specialized forms of service as supervision, counseling, or the administration of an elementary, secondary, vocational, or technical school. For the present, teachers of industrial arts and of industrial and technical subjects should also ordinarily seek this degree.

1. An approved program for this degree, in which Education shall constitute the major portion, must have unity in terms both of purpose and of sequential development.

2. The courses taken by the candidate should fall into three groups designated A, B, C. The determination of the groups into which particular courses fall will depend upon the professional purpose of the candidate in his graduate study and an integration of courses to such purpose.

GROUP A. This group includes courses of a special nature and of immediate interest, such as the technical courses in English, in the languages (or a language), history, sciences (or a science), agriculture (or a division thereof), etc., and the professional studies appropriate to the special field. It is expected that at least a third of the candidate's program will fall in this group.

GROUP B. This group includes courses in the theory and science of education which will furnish the several types of background that are warranted by the nature of courses in Group A. Courses to the extent of one-third of the total may be chosen in this group. Educational Psychology, including Measurement, History and Philosophy of Education and other courses necessary to integration, such as general studies appropriate to the organization and administration of schools at the several educational levels, are representative of this group.

GROUP C. This group includes courses intended to meet the particular needs of the candidate not adequately met in Groups A and B. In certain cases as much as a third of the candidate's program should be taken in this group.

For the selection of courses in all the above groups, the candidate should consult his special committee, whose approval is necessary.

3. The candidate is not required to present a formal thesis or essay; but, if he does not do so, he is expected to complete a problem to the satisfaction of his committee. If the candidate seeking a degree through summer session attendance does not present a thesis or an essay that complies with the standards and requirements for the degrees of Master of Arts and Master of Science, including deposit of two bound copies in the University Library through either the Graduate School or the School of Education, a fifth summer of work shall be required. It is expected that normally all work will have been taken at Cornell University. However, under exceptional circumstances, any necessary study beyond the required four summer sessions of residence may be done at some other institution of comparable standards but only when

this work can be shown, to the satisfaction of the Special Committee, to be an integral part of the student's entire program.

4. The student's Special Committee, by the middle of the third summer of study (or by the end of the first term of graduate study), shall determine the fitness of the candidate to continue his candidacy for this degree through examination or such other suitable means as the committee may elect. The action of the Committee shall be recorded in the office of the School of Education.

#### OTHER

**MASTER'S DEGREES** Certain students in education may be interested in one of the following degrees: M.A., M.S., M.S. in Agr. There are two procedures by which any of these degrees may be secured, called Plan A and Plan B. Plan A is intended primarily for those candidates who, by suitably restricting their graduate work to a given field, wish to acquire some degree of competence in that field, frequently as a basis for further study and research or for professional purposes. Plan B is designed for those who wish a somewhat broader training than is permitted in Plan A.

#### THE DEGREE OF

**DOCTOR OF PHILOSOPHY** Work leading to the Ph.D. degree is designed primarily to give the candidate a thoroughly comprehensive view of a field of knowledge; to train him in methods of research and scholarship in that field; and to develop qualities of leadership and a feeling of responsibility to add to the sum total of knowledge in his field. The requirements for the degree include, in addition to the requirements in foreign language, (1) six terms of residence as a graduate student, (2) the satisfactory completion, under the direction of a Special Committee, of work in one major subject and two minor subjects, (3) the presentation of an acceptable thesis, and (4) the passing of a qualifying examination and a final examination.

*Major and Minor Subjects.* A candidate for Ph.D. must select a major subject and two minor subjects properly related to the major subject. A list of approved major and minor subjects in each of the several fields of graduate study will be found in the *Announcement of the Graduate School*. There are no requirements in semester hours for the Ph.D. degree.

*Requirements in Foreign Languages.* Each candidate for Ph.D. must demonstrate his ability to read both French and German (or two

languages, other than English, approved by his Special Committee), by passing in each of these languages an examination given by a member of the Language Examination Board.

A candidate for Ph.D. is expected to meet the foreign language requirements at the beginning of his candidacy at Cornell University for that degree. A minimum of seven terms of residence is required of a candidate who does not pass at least one language examination at this time. A minimum of three terms of residence is required after completion of all language requirements, except in the case of a student admitted to candidacy with two or more terms of residence credit; in such a case, a minimum of two terms is required.

Language examinations passed within one month after registration are considered as being passed at the time of registration.

Additional requirements in foreign language may be made at the discretion of the student's Special Committee.

*Residence.* For Ph.D. a minimum of six terms of residence is required; or seven terms if the candidate does not pass one of the examinations in foreign language (see requirements in foreign language) on beginning candidacy at Cornell University. Upon the recommendation of the student's Special Committee residence up to a maximum of four terms may be credited toward the doctor's degree for work done in other universities.

*Research Under Personal Direction.* A candidate for the Ph.D. degree who has demonstrated ability in graduate studies may, upon recommendation of his Special Committee and with the approval of the Dean, receive residence credit for research done during the summer under the personal direction of a member of the Faculty of the Graduate School. The privilege of working under Personal Direction will not ordinarily be granted to a student until he has completed at least a full year of graduate work in regular sessions. Application for the privilege must be accompanied by a statement from the member of the Faculty concerned, showing the number of weeks during which he is prepared to supervise the work of the student and the nature of the research to be done. To secure credit for such work, the student must register *in advance* at the office of the Graduate School, and the professor must certify to its satisfactory completion. A maximum of two terms may be earned in this way.

Credit toward the Ph.D. degree earned in Summer Sessions at Cornell or elsewhere is limited to two terms. A candidate who has already earned two terms of credit by work in summer sessions and



who has demonstrated ability in graduate work, may, however, upon the recommendation of his Special Committee and with the approval of the General Committee, earn one more term of credit by work in Summer Sessions at Cornell with the privilege of credit for an additional term for research under Personal Direction. But the last year of residence must be in regular academic sessions and in successive terms.

*Thesis Requirement.* The thesis for the Doctor's degree must give evidence of the candidate's power to carry on independent investigation and must be satisfactory in style and composition. The thesis must be acceptable to the candidate's Special Committee in respect of both scholarship and literary quality. The completed thesis must be in the hands of the Special Committee at least fifteen days before the final examination for the Doctor's degree; and, during the five days immediately preceding this examination a typewritten copy approved by all members of the Special Committee, shall be on file in the office of the Graduate School. *For further information regarding the thesis and the thesis abstract, see the Announcement of the Graduate School.*

*Qualifying Examination.* Each candidate for Ph.D. must pass a qualifying examination given by his Special Committee. The examination is ordinarily given at the end of the first year of graduate study, if that year is at Cornell. If the candidate has had one year or more of graduate work elsewhere, the qualifying examination should be given as soon as possible after his entrance into the Graduate School.

Before presenting himself for Final Examination B or C (see next paragraph), each candidate must have earned at least two terms of residence credit after the passing or the waiving of the qualifying examination.

*Final Examination.* Each candidate for Ph.D. must pass a final examination, conducted by his Special Committee and covering (1) the major and minor subjects and (2) the thesis and related topics. At the discretion of the Special Committee, the two parts of this examination may be given either separately or in combination.

When the two parts are given separately, an examination, dealing mainly with the major and minor subjects and designated as Final Examination A, may be given at the end of the fourth term of candidacy, or thereafter. Final Examination B, on the thesis and related topics and on such other work as the student may have done after completing Examination A, will be given after the residence requirement has been satisfied and the thesis has been completed and filed.

When the two parts of the final examination are given in combination, the combined examination, designated as Final Examination C, will be given after the residence requirement has been satisfied and the thesis has been completed and filed.

#### WORK IN

SUMMER SESSION The *Announcement of the Summer Session* contains a statement regarding the graduate work offered during that period.

Credit toward advanced degrees may be earned in Summer Sessions in accordance with the following conditions and rules:

For A.M., M.S., M.S. in Agr., and Ph.D., residence during Summer Sessions may be counted at the rate of three Summer Sessions for one term of credit, and five sessions for two terms; for all other advanced degrees at the rate of two Summer Sessions for each term of credit.

Since Cornell University grants no advanced degree for less than two terms of residence and work in the Graduate School and since the minimum residence requirement for Master's degrees is two terms, work in Summer Sessions elsewhere can not be counted toward Master's degrees at Cornell.

The credit toward the Ph.D. that may be earned in Summer Sessions at Cornell University or elsewhere is limited to two terms. A candidate who has demonstrated unusual ability in his graduate studies, however, may, upon recommendation of his Special Committee and upon approval by the General Committee, earn one more term by work in summer sessions at Cornell, with the privilege of credit for an additional term for research under personal direction. But the last year of candidacy for Ph.D. must be spent in residence at the University and in consecutive, regular sessions.

To obtain residence credit in the Graduate School for Summer Session work the candidate must register both in the Summer Session and in the Graduate School. He must file in the office of the Graduate School within one week after registration a statement-of-courses blank, as provided for students in the regular session.

#### TUITION FEES

##### UNDERGRADUATE

COLLEGES A student pursuing the five-year program will pay the tuition fee of the College in which he is matriculated as a candidate for the Bachelor's degree. Tuition rates, a term, are as follows:

Two hundred dollars in the College of Arts and Sciences.

Two hundred dollars in the College of Architecture.

Two hundred dollars in the College of Engineering.

One hundred dollars in the College of Agriculture.\*

One hundred dollars in the College of Home Economics.\*

For details see the *General Information Number*.

#### THE GRADUATE

SCHOOL A tuition fee of \$100 a term is to be paid by all students registered in the Graduate School.

Certain classes of students are exempt from the payment of the tuition fee. They are:

(1) Graduate students holding certain appointments as University fellows or Graduate Scholars, and holders of certain temporary fellowships and scholarships.

(2) Resident Doctors upon recommendation of the Dean.

(3) Certain members of the instructing staff. See the *Announcement of the Graduate School* for 1944-45.

A member of the teaching staff registered in the Graduate School, whose salary exceeds \$750 a term shall pay tuition in proportion to the amount of residence credit allowed.

A matriculation fee of \$11,\*\* an administration fee of \$12.50 a term, a health and infirmary fee of \$10 each term, a Willard Straight Hall fee of \$5 each term, and a graduation fee of \$20 are also charged. An abstract fee of \$12.50 is required of each candidate for the Ph.D. degree.

Any tuition or other fee may be changed by the Board of Trustees to take effect at any time without previous notice.

#### GRADUATE FELLOWSHIPS, SCHOLARSHIPS, AND ASSISTANTSHIPS

Financial assistance to students in the various phases of the work of of the School of Education is available as indicated below. These aids are granted only to students matriculated in the Graduate School who, in addition to adequate preparation in general subjects, in an appropriate special field, and in Education, *have had a sufficient amount of successful teaching or other professional experience* to warrant seeking further preparation for educational leadership. Experience is not required of candidates for Number 3.

\*Under certain conditions residents of New York State are exempt from the payment of tuition in the College of Agriculture and the College of Home Economics.

\*\*Payable upon first registration only.

1. *Agricultural Education*. One \$1000 assistantship available normally only to one who is a candidate for the doctorate. It is essential that the candidate shall have had satisfactory teaching experience in vocational agriculture and, in addition, teacher training or supervisory experience in agricultural education.

2. *Human Growth and Development*. One \$900 assistantship. The holder must have had extensive preparation in general and educational psychology, especially their genetic phases, and in biological sciences.

3. *High School Teachers in Training*. Ten free tuition scholarships to students in the fifth year of the five-year program who give promise of becoming outstanding secondary school teachers in any of the following fields: Agriculture, Art, English, Foreign Language, Home Economics, Mathematics, Science, Social Studies. Five of these scholarships are available to students who have received their undergraduate preparation in institutions other than Cornell.

4. *Industrial Education*. One or more assistantships at not more than \$600 each available to persons preparing themselves for leadership in vocational industrial education.

5. *Nature Study and Science Education*.

a. Two or three American Nature Association research fellowships of \$400 to \$600. Free tuition is not included.

b. One \$150 scholarship given by the late Anna Botsford Comstock and available to graduate students in nature study. (Because of accumulation, this scholarship will have a cash value of \$450 during the year 1944-45.)

c. One \$500 assistantship available to a person of experience preparing for a leadership position in the teaching of science.

d. Two \$725 assistantships available to persons of superior preparation and teaching ability for part-time assistance in the directed teaching program carried on in the Ithaca High Schools.

6. *Rural Education*.

a. One \$1000 Research assistantship available to a person desiring to prepare for professional service in some field for which the Department of Rural Education offers preparation. (For example: administration, agricultural education, educational psychology, elementary education, guidance, home economics education, nature study and science education,



philosophy of education, secondary education, supervision.) A well-planned project in research must be submitted. Normally this assistantship will be granted only to a candidate for the doctorate who is within approximately one year of completing the requirements for that degree (including a reading knowledge of two foreign languages, preferably French and German).

b. One \$500 and one \$350 assistantship available to students majoring in any phase of the work of the Department of Rural Education.

7. *Social Studies Education.*

a. One \$500 assistantship available to a person of experience preparing for a position of leadership in the teaching of the social studies.

b. Two \$750 assistantships available to persons of superior training and teaching ability for part-time assistance in the directed teaching program carried on in the Ithaca High Schools.

8. *Edward A. Sheldon Scholarship for Women Teachers.* This scholarship may be awarded "to any woman of suitable qualifications who needs this assistance", preference being given candidates in the following order: first, a woman graduate of the State Teachers College at Oswego, New York; second, a woman graduate of any other New York State Teachers College; third, a suitably qualified woman who is preparing to teach. The funds available will be apportioned among qualified applicants, usually not exceeding \$250 for any one scholarship. Free tuition is not included.

*Free tuition in the Graduate School is given in addition to the cash awards, except as indicated.*

The amount and character of the service required of the holder of an assistantship varies, but information on this point may be secured upon request.

## THE BUREAU OF EDUCATIONAL SERVICE

Established in 1932, the Cornell University Bureau of Educational Service correlates the educational services which the University is prepared to offer with the needs of the institutions which it serves. These services require contact with students and faculty at the University, with alumni, and with public schools and other educational institutions and officials.

The chief activities of the Bureau are concerned with the various phases of teacher placement. In the field of education, this is a highly specialized function. Each prospective teacher prepared at Cornell is urged to register with this office well in advance of the completion of his training. By means of this registration, there is on file in appropriate form comprehensive information as to personal, educational, and experimental qualifications of each registrant. With the cooperation of the registrant, this record is kept up to date at all times and is available to any institution or qualified official upon request.

The Bureau's program of rendering discriminating service to interested educational institutions is facilitated by and combined with the follow-up check on registrants previously placed. By this means a realistic evaluation is attained which permits a practical upgrading program to be followed.

Answering frequent requests for information about trends and demands, both long and short term, forms an important part of the Bureau's service. Location of positions, salary range, contract terms, certification requirements, and many other factors are items on which the Bureau is equipped to give up-to-date information.

All prospective teachers, as well as those already in the field, are urged to avail themselves of the services which the Bureau offers. It is located in 102 Stone Hall.

## THE SUMMER

**SESSION** To place the facilities of the University at the disposal of those persons who have a part of the summer free for study, the Summer Session offers courses ranging from one to six weeks in length. The 1944 Session begins on July 3 and ends on August 11. Courses for teachers, school administrators, and graduate and undergraduate students will be offered. Prospective students should apply to the Director of the Summer Session for the Announcement which includes the form to be used in applying for admission.

## *TYPES OF PROFESSIONAL WORKERS FOR WHOM PROGRAMS ARE OFFERED*

The School of Education prepares workers for many different types of positions. Some of these workers will go into general education;

others into specialized fields. Some will find their professional opportunities in the urban centers; others in the rural areas. In setting up its various curricula, the School of Education naturally cooperates with various units of the University, the major ones being the Colleges of Agriculture, Architecture, Arts and Sciences, Engineering, and Home Economics.

Curricula for the several types of workers in the urban centers correspond, in general, to such curricula elsewhere. In rural education, the offerings undertake to adapt the general principles of education to the special conditions found in rural areas (defined in New York State as communities with a population of less than 4500). In recognizing that these special conditions make adjustments in the program of preparation desirable, the fact is not overlooked that elements common to all education usually predominate in any curriculum. Among those given special attention as rural workers are: teachers, supervisors, and directors of agriculture; principals of central, consolidated, and village schools; county, district, and village superintendents; and specialists in rural education for normal schools, teachers colleges, universities, and state education departments. Courses for elementary teachers are given only on the graduate level. The School of Education also renders assistance to certain departments in the Colleges of Agriculture and Home Economics in the preparation of such rural workers as 4-H club leaders and county agricultural and home demonstration agents. In brief, Rural Education at Cornell University aims to prepare various types of leaders competent to deal understandingly with those problems, both general and special, found in rural America. In all curricula, students are given opportunity to become acquainted with the educational problems and practices found in representative New York communities. Notable among these resources for effective teacher preparation is the system of central rural schools that offers, in most communities, exceptional opportunities for the education of rural people.

On pages 20-39 brief descriptions are given of the offerings available for the preparation of these several types of workers. "I" describes the program for the preparation of secondary school teachers; "II" describes offerings for other educational officers. Under the same numbers will be found courses offered in these programs. (See pages 40-49).

# I. THE FIVE-YEAR PROGRAM FOR SECONDARY SCHOOL TEACHERS

This program is recommended for all prospective teachers of secondary school subjects and is required of all prospective teachers of academic subjects preparing at Cornell University to enter teaching in New York State after December 31, 1942. The general pattern follows:

## *Pre-Professional studies*

### Freshman Year

Social Science A and B. . . . . 6 hours  
(Freshman or Sophomore Year)

### Sophomore Year

Human Growth and Development. . . . . 6 hours  
*First selection of prospective teachers*

## *Professional Studies*

### Junior Year

100. Educational Psychology. . . . . 3 hours  
120. Social Foundations of Education. . . . . 3 hours  
*Second selection of prospective teachers*

### Senior Year

130. The Art of Teaching. . . . . 10 hours  
Academic subjects, 130 and 130a  
Home Economics, 130b  
Agriculture, 131, 132a, 132b  
*Final selection of prospective teachers*

### Fifth Year

200. Apprentice teaching. . . . . 6 hours  
210. Special Problem in Teaching. . . . . 2 hours  
220. Philosophy of Education. . . . . 2 hours

(The first four years of this sequence satisfy the present requirements for certification in vocational agriculture and home economics.)

The remainder of the student's program will be made up of: (a) courses required by the college in which the student is registered; (b) courses in the field or fields in which he plans to teach; (c) courses helpful in developing understandings and appreciations of particular significance to teachers.



TEACHERS OF  
ACADEMIC SUBJECTS

*Graduation Requirements of the College of Arts and Sciences.* At Cornell University all prospective teachers of academic subjects, except students in the College of Agriculture preparing to teach biological science, will register in the College of Arts and Sciences and must meet the graduation requirements of that College. In brief, the College requires the completion of a full year course in English, foreign languages, history, and laboratory science. The details may be secured from the College Announcement.

Teachers of science who stress the biological aspects of this field may be prepared either through the College of Arts and Sciences or through the College of Agriculture. Students in the College of Agriculture must, of course, meet the graduation requirements of that College.

*Preparation in the Teaching Field.* The student must select, after the first year of residence and before registering for the first term of the third year, a major field of study. The specific requirements vary somewhat according to the field but, in general, course work to the extent of approximately 24 hours in the major subject and 18 hours in related subjects is required.

As an aid to the prospective teacher, programs in the academic subjects have been established for the four undergraduate years which meet college requirements and provide the preparation needed for teaching in the secondary schools. These programs vary in extent and in the number of prescribed courses. It is desirable that some one of the combination programs below be selected, although other combinations may be arranged to suit individual preferences.

*English and Public Speaking.* The program in English follows closely the pattern prescribed for students majoring in that subject. Composition, reading of expository prose, and introduction to drama and fiction will comprise the work of the sophomore year. These aspects of the subject will be developed further in the upperclass years and, in addition, the student will select the literature of some period and the works of some author for intensive study. Nine hours in public speaking must be included in the related subjects. The total requirement of the major is 45 hours. Students primarily interested in speech and dramatics should major in public speaking and supplement that training with considerable work in English.

*Foreign Language.* In foreign language, concentration in Latin and French is provided which satisfies the requirements of the major in either subject. Additional preparation in a third language is recommended since the object is to prepare a teacher of language rather than a specialist in a single subject. The course work in Latin and French totals 54 hours.

*Mathematics.* Preparation for teaching mathematics is based on the major requirement in the subject: 9 hours of analytic geometry and calculus plus 15 hours of advanced courses. The student should also complete the 30 basic hours in science.

*Science.* The program in science is based on 12 hours of biology, 12 hours of physical science, and 6 hours of geology. Approximately 24 additional hours of advanced courses are necessary to satisfy the major requirements in physics or chemistry or one of the biological sciences. The prospective teacher of science will find it to his advantage to meet the minimum certification requirement of 15 hours in mathematics.

*Social Studies.* In social studies the student may major in history, economics, government, or sociology, although concentration in history is preferable. The basic program must include 18 hours of history, and 18 hours of social science. Depending upon the major subject selected, the number of hours in the program will aggregate from 48 to 60.

In the fifth year the prospective teacher of an academic subject may select, under the guidance of his Special Committee, approximately 20 hours of advanced courses and seminars in his teaching field.

*General Electives.* After meeting the minimum requirements described above, the student still has opportunity to elect courses according to his needs and interests. These electives may, with the approval of the student's adviser, be chosen from professional courses, from the student's teaching field, or from other University offerings.

#### TEACHERS

OF AGRICULTURE *Graduation Requirements of the College of Agriculture.*

Students preparing to teach in the field of vocational agriculture will register in the New York State College of Agriculture and must meet the requirements of that College for graduation as a part of the five-year program. The College of Agriculture requires the completion of the following program of courses: orientation, 1 hour; hygiene, 2 hours; English, 6 hours; botany, biology or zoology, 6 hours; chemistry or physics, 6 hours; geology, 3 hours; basic sciences and social studies, 24 hours; electives in the College of Agriculture, 54 hours; general electives, 20 hours.

*Technical Studies in Agriculture and Related Sciences.* In the present plan for the preparation of prospective teachers through the New York State College of Agriculture, a total of 68 semester hours in Agriculture and Related Science is required. Thirty-six of these hours must be distributed in five broad fields as follows:

Agricultural Economics and Farm Management.  
Agricultural Engineering and Farm Mechanics.

Animal Husbandry and Poultry Husbandry.  
Farm Crops and Horticulture.  
Soil Technology.

In addition to a minimum of 36 hours of credit taken in the above five fields, the candidate must present 24 hours of credit in agricultural courses approved by his adviser.

During the fifth year advanced preparation in one or more of the above five fields of agriculture will be possible to the extent of approximately 20 hours.

To assist the student in meeting the broad requirements of the five fields and the elective hours indicated, a plan is set up for the use of students and their advisers. This plan provides for courses as indicated in the above 36-hour requirement and as many specialized elective courses as are consistent with the demands of the types of agriculture in New York State.

*General Electives.* The prospective teacher will find opportunity to select, with the approval of his adviser, such courses from agriculture, science, or other University offerings as will contribute further to his preparation for teaching.

#### TEACHERS OF

HOME ECONOMICS *Graduation Requirements of the College of Home Economics.* The New York State College of Home Economics requires the completion of the following: English, 6 hours; hygiene, 2 hours; basic sciences, 30 hours, of which 9 are to be in the biological sciences, 9 in the physical sciences, and 12 in the social sciences; home economics, 40 hours; electives, 42 hours, of which 24 may be in any College of the University; 18 hours must be in courses offered by the Colleges of Home Economics, Agriculture, and Veterinary Medicine.

*Preparation in Home Economics and Related Subjects.* In the majority of schools, instructors in home economics teach all phases of homemaking. Even in those schools in which homemaking is departmentalized, it is desirable that each teacher have a broad view of the entire field. To help achieve this, the following subject matter is suggested, adjustment being made according to individual background and needs:

*Family Relationships and Child Study.* Part of the work in family relationships may be covered through courses dealing with The Family. Part should be taken in Home Economics. Child study may include work in Child Psy-

chology, and should include observation of child behavior and guidance in a nursery school, together with some participation in working with children through a nursery school, through play groups, or in homes.

*Health in Home and Community and Home Nursing.* This should include study of home and community hygiene, first aid and emergencies in the care of the sick at home. A college course is required, rather than a Red Cross course in first aid.

*Household Management and Economics of the Household.* Study in this field should be concerned with the management and economic principles as they apply in the home. Consideration should be given to the management of the house with relation to family living. Some experience in practical problems should be included. It is also desirable to develop that phase of managerial ability involved in the interrelationships in the home and the community.

*Nutrition and Food Preparation.* This should include nutrition for all ages, the science of food preparation, food buying, family meals, and the food budget.

*Art and Home Furnishing.* This may include courses in applied art, or art principles, or design and color, or other types of courses in applied art as home crafts. The work in furnishing and house planning should emphasize furnishing in relation to family living.

*Clothing and Related Subjects (Design, Textiles, Construction).* This should include an understanding of the essentials of personal grooming, care of clothing, the personal wardrobe, clothing for the family, the clothing budget, the construction of clothing, and the design of costume. The textiles study should include textiles used in clothing and home furnishings.

*Related Sciences.* This should include applied chemistry, applied physics, bacteriology, and physiology.

In addition to the above requirements in suggested subject matter in Home Economics, a student preparing to teach should plan her college program and her experiences during the summers so as to build an understanding of herself, of children, and of adults. She should be able to recognize in homes and communities the significant situations and problems to which home economics applies, to use home economics to achieve sound practices in her own living, and to give evidence of a growing skill in helping others to interpret and apply its findings and standards to the solution of individual, home, and community needs.

In the fifth year the prospective teacher of Home Economics will have opportunity to secure approximately 20 hours of advanced instruction in her teaching field.

*General Electives.* The student may select, with the approval of her adviser, such courses from home economics, science, or other University offerings as will enlarge her understanding of her teaching responsibilities.



## DIRECTED AND

## APPRENTICE TEACHING

The five-year program provides for two types of practical work, looking toward the development of ability to perform successfully the various responsibilities of a teacher.

The first type involves observation and directed teaching which is completed usually during the undergraduate years. It is designed to provide opportunity to the student to associate himself with skillful teachers, who are usually employees of both the University and local boards of education, that he may learn, firsthand, to understand what is required in handling classroom situations, particularly what is involved in efficient teaching, and what is required to utilize the resources of a community to the greatest advantage.

Apprentice teaching, given in the fifth year of the five-year program, is the second type of participation and the final step in the pre-service preparation through experience. It is a continuation of directed teaching, but at this stage of participation, the student assumes full teaching responsibility under the general supervision of the principal and the supervising teacher, and comes to perform in the school and community all of the functions of a regular teacher, including such community and other studies as good teaching requires.

Observation and directed teaching are conducted in selected schools of Ithaca and of nearby communities. Apprentice teaching also will be done in off-campus schools, selected primarily to provide better than average opportunity for experience and growth. Students engaged in apprentice teaching will live in the school community during the period of this experience and will be expected to participate in community life.

## GUIDANCE

## AND SELECTION

In most cases the student will be assigned to a regular college adviser on entrance. In order that the prospective teacher may secure advice regarding his professional program, he should, as early as possible in his university experience, consult with the official adviser in his teaching field. A list of these advisers is given on page 39.

As the student proceeds in his preparation for teaching, appraisal will be made of the development of his abilities, understandings, appreciations, and of such other qualities as make for success in teaching. Special determinations will be made at three principal points as

to the fitness of the candidate to continue: (1) at the end of the sophomore year, (2) prior to the period of student teaching in the senior year, and (3) prior to apprentice teaching in the senior and fifth years. Committees responsible for selection in the several fields will be concerned with the personal and physical fitness of the candidate, his emotional and intellectual equipment, his general and special academic competence, his familiarity with current affairs, and his ability to use the English language.

Knowledge gained of the student by his advisers and his instructors, supplemented by the health record and the more formal measures such as psychological and personality tests, will provide information useful in judging the strictly personal factors involved. In general each student will be expected to maintain a standing in scholarship at least equal to the average of his college. Competence in his field of teaching and his knowledge of current affairs will be tested at the close of his fourth year of residence. A steady growth in the use of English will be expected of each student. Standards of accomplishment will be set up for the several groups of prospective teachers, beginning in the freshman year and checked at frequent intervals throughout the five-year period of preparation. Training in the organization of materials, in platform speaking, and in reading will be required. Opportunity to discover and remedy defects in speech will be provided.

These requirements and standards may be supplemented by additional requirements in the several fields of training in order to insure a high degree of competence at all levels and to meet the special demands in different areas of teaching. Students entering the program later than the sophomore year will be expected to meet the standards and requirements indicated above.

#### REGISTRATION AND

##### DEGREES

As previously indicated, the student preparing to teach will register for the first four years in the appropriate undergraduate College. In the fifth year he will register in the School of Education.

At the end of four years he will normally receive the Bachelor's degree appropriate to his college: in Arts and Sciences, Bachelor of Arts; in Agriculture and Home Economics, Bachelor of Science. Upon the completion of the five-year program, the degree of Master of Education will be conferred.

## THE COMPREHENSIVE

## EXAMINATION

At the end of the fifth year the student will be required to pass a comprehensive examination.

This examination, which may be written or oral, or both, will be given by the student's Special Committee, and will test his knowledge of his teaching field, his understanding of educational theory and practice, and his ability to give instruction to secondary school pupils. A prerequisite to the examination shall be demonstrated skill in classroom situations.

## REQUIREMENTS FOR STUDENTS

## ENTERING PROGRAM IN FIFTH YEAR

Students late in deciding to prepare for teaching and students transferring from other institutions at the end of the fourth year whose preparation in their special field is adequate can ordinarily satisfy the requirements of the program in one summer session and the fifth year. In, general, such students are expected to meet the full requirements of the program, either by taking the specific courses indicated or by offering equivalent credit.

Correspondence with Dr. W. A. SMITH, Chairman of the Committee on Selection, is invited.

## ART, INDUSTRIAL EDUCATION, AND INDUSTRIAL ARTS

*Because of special conditions prevailing in Art, Industrial Education, and Industrial Arts, certain modifications in the regular five-year program have been made. These are described herewith.*

## TEACHERS

## OF ART

The School of Education cooperates with the College of Architecture in the preparation of teachers of Art. Students desiring to prepare in this field should register in the College of Architecture as candidates for the degree Bachelor of Fine Arts. The curriculum is as follows:

		Hours	
		1st	2nd
		Term	Term
FIRST YEAR 30 hrs.	English.....	3	3
	Fine Arts 1a and 1b.....	3	3
	Arch. 510 (Descriptive Geometry).....	3	3
	Arch. 309 (Elementary Drawing & Painting).....	3	3
	History—Elective.....	3	3

		<i>Hours</i>	
		<i>1st</i>	<i>2nd</i>
		<i>Term</i>	<i>Term</i>
SECOND	Human Growth and Development.....	3	3
YEAR	Social Science A & B.....	3	3
30 hrs.	Arch. 300 (Elementary Composition).....	3	3
	Arch. 800 (Textile Design, Costume Design, Crafts)...	3	0
	Fine Arts 10a and 10b (History of Arch.).....	3	3
	Public Speaking 45—Stage Craft.....	0	3
THIRD	Ed. 100 Educational Psychology.....	3	0
YEAR	Ed. 120 Social Foundations of Education.....	0	3
34 hrs.	Arch. 311 (Intermediate Drawing and Painting).....	3	3
	Arch. 301 (Intermediate Composition).....	3	3
	Arch. 120 (Interior Design and Decoration).....	2	2
	History of Art-Elective.....	3	3
	Elective.....	3	3
FOURTH	Ed. 130 The Art of Teaching.....	3	3
YEAR	Arch. 314 (Advanced Drawing and Painting).....	6	6
30 hrs.	Arch. 304 (Advanced Composition).....	4	4
	Arch. 325 (Graphic Arts).....	2	0
	Arch. 324 (Painting Technics).....	0	2
FIFTH	Ed. 130 The Art of Teaching.....	2	2
YEAR	Ed. 220 Philosophy of Education.....	0	2
31 hrs.	Arch. 315 (Drawing and Painting).....	6	0
	Arch. 305 (Composition).....	5	0
	Elective.....	3	3
	Thesis.....	0	8

The technical work in Art, History of Art, and related subjects, required of such students, is the equivalent of more than three full years of work, with the remainder of the time being spent on general education and professional education.

The technical work in Art is given by the members of the staff of the Department of Painting and Sculpture who are all practicing artists. It affords a training in the fundamentals of design, drawing, and painting, which aims to equip the student as a competent practitioner of his art, as well as a teacher.

#### TEACHERS OF TECHNICAL AND

RELATED TECHNICAL SUBJECTS The permanent state certificate for teachers of technical subjects requires one full year of study in addition to undergraduate work of a technological nature, supplemented by three years of practical experience in the technical field for which the certificate is desired.

To meet the needs of this group Cornell University has provided programs of study leading to the degrees of Master of Science (Plan



B), Master of Education, and Master of Science in Education. The degree which the student should seek will depend upon his purpose and his background of training and experience. Those who have had some teaching experience, but who have not met the certification requirements of the State, should normally register for the degree of Master of Science (Plan B). Graduates of technical colleges, either at Cornell or elsewhere, who have not had teaching experience should seek the degree of Master of Education. Those who wish to make some progress toward satisfying the state requirements in administration and supervision (see pages 10-11) at the same time that they are completing the requirements for teaching should, usually, work toward the degree of Master of Science in Education.

No fixed curricula are prescribed. The program for each student is worked out with his special committee, the subject required in the fifth year being selected upon the basis of the student's needs. Courses in the fifth year of the program must, naturally, be of an advanced nature. The entire program will include courses in basic sciences, engineering or other technical fields, economics, labor problems, general and special courses in education, personnel administration, and the like. This work is offered during the regular academic year and in the summer session.

Because of conditions peculiar to this field and the great variations in types of background of candidates, an advisory committee on admissions has been appointed to advise with the committee on admissions to the School of Education concerning candidates for advanced study. This advisory committee is made up of one representative from the College of Engineering, one from the general education faculty of the School of Education, one from industrial education, and one from the Bureau of Industrial and Technical Education of the State Education Department.

Candidates are advised to make application for admission to graduate work in this field as early as possible so that the committee may have adequate time for the consideration of their applications.

#### TEACHERS OF

**INDUSTRIAL ARTS** At the present time Cornell offers opportunities in this field only during the Summer Session. Those preparing to teach Industrial Arts will attend the State Teachers College at Buffalo or Oswego, or some institution offering an equivalent program, for the usual period of undergraduate work. Upon the

satisfactory completion of such a curriculum, Cornell will admit, upon a selective basis, as many teachers as the facilities of the University permit.

The program outlined below is based on the assumption that industrial arts education in the secondary schools should deal increasingly with the interpretation of industrial processes and practices as a phase of general education, and that these processes and practices are becoming more complex year by year. This seems to require that industrial arts teachers understand more thoroughly both the activities of industrial life and the trends in industrial and social developments.

The curriculum is as follows:

	<i>Credit Hours</i>
<i>Professional Education</i>	
Philosophy of Education.....	2
Seminar in Industrial Arts Education with courses for master teachers or for supervisors chosen from such offerings as.....	4-6
a. Teaching problems in industrial arts	
b. Curriculum and course of study revision	
c. Research problems in industrial arts	
d. Administration and supervision of industrial arts	
Project-Development Laboratory (Advanced shop-laboratory work of creative type).....	4-6
Critical Study or Thesis.....	2-6
Electives.....	0-4
<i>Technical</i>	
Industrial Relations.....	2
Materials, Processes, and Tools of Industry.....	4-6
Recent Developments in Technology.....	2-4
Electives (Physics, mathematics, meteorology, engineering).....	0-4
<i>Social Studies</i>	
Recent Social Trends.....	2
<i>General Electives</i> .....	0-8

## II. OPPORTUNITIES FOR OTHER EDUCATIONAL OFFICERS

### ADMINISTRATION AND

SUPERVISION As indicative of increasing standards that are becoming effective in this field in many

states, New York requires for permanent certification thirty hours of graduate work. In the list given below may be found courses that enable a person with appropriate undergraduate training to prepare as: superintendent, county superintendent, district super-

intendent, supervising principal, elementary school supervisor or secondary school supervisor. Courses 261a, 263 and 276 are the basic courses. Administrators of vocational schools and programs, if prepared for teaching in a vocational subject, will find opportunity for appropriate specialization through such courses as 243, 267 and 269. (See statements under "Agricultural Education", "Home Economics Education", and "Industrial Education".)

*Principal Courses in Education:*

243	262a	266	276
260	262c	267	293
260a	263	267c	300
260b	264	268	
261a	265	269	

*Related Courses in Education:*

7	227	253	282
20	234	276	294c
212	251	281	295

*Related Courses in Other Fields*

Agr. Econ. 135	Local Government
Agr. Econ. 138	Taxation
Agr. Econ. 181	Land Economics
Agr. Econ. 236	Problems in Public Administration
Agr. Econ. 238	Seminar in Public Finance
Econ. 11	Money, Currency and Banking
Econ. 15	Trade Fluctuations
Econ. 41	Labor Conditions and Problems
Econ. 44	Public Policies and Industrial Relations
Econ. 81	Economics of Enterprise
Econ. 82	Economic Analysis
Govt. 7	Public Administration
R. Soc. 132	Rural Leadership
R. Soc. 211	The Rural Community
R. Soc. 212	Rural Sociology
Soc. 20	Social Pathology
Soc. 40	Population Problems
Soc. 60	Social Anthropology
Soc. 21	Criminology

AGRICULTURAL

EDUCATION

Under the National Vocational Education Acts, the State Education Department of New York has made provision for the preparation of leaders in the several phases of agricultural education, other divisions of vocational education cooperating. In the several states specific qualifications for teachers, for

supervisors and directors, and for teacher-training in designated institutions have been set up. These qualifications define the acceptable standards pertaining to practical working experience, technical education, professional education, teaching experience in approved vocational schools, supervisory or administrative experience.

In addition to the preparation of leaders, as indicated above, administrators and supervisors, responsible for the general supervision of vocational agriculture (together with other vocational personnel), are becoming concerned about the necessary preparation for professional leadership. This interest has developed also among leaders in the related fields of agricultural extension, vocational guidance and counseling, special agricultural services here and abroad, and in other agricultural programs among private and public agencies. The courses listed below represent these required or elected most frequently in connection with graduate work in agricultural education.

*Principal Courses in Education:*

134a	232	267	277
194	245	267b	300
199	250	267c	

*Related Courses in Education:*

211a	234	263	290
212	251	276	294a
218	253	281	294b
223	261a	282	295

*Courses in Technical Fields (See Announcement of the New York State College of Agriculture, Cornell University)*

Graduate students majoring in Agricultural Education elect minors in many different fields. Agricultural Economics, Agricultural Engineering, Agronomy, Animal Husbandry, Bacteriology, Dairy Industry, Ornamental Horticulture, Plant Breeding, Pomology, Poultry, Rural Sociology, Vegetable Crops, constitute the principal fields of such minors. Frequently also majors in these fields elect minors in Agricultural Education. Students are advised to address these departments for information.

EDUCATIONAL

PSYCHOLOGY

The courses in educational psychology are intended to meet the needs of two general groups of students: (1) those who specialize in educational psychology, such as college teachers of this subject, and those who intend to meet the state



certification requirements for the position of school psychologist, and (2) those teachers, administrators, supervisors, social workers, students of family life, and others who wish to supplement their preparation with selected psychological courses.

*Principal Courses in Education:*

7	112	212	253a
8	114	213	282
18	117	217	283
20	119	218	H.G. and D. (A and B)
25	199	219	
100	211a	251	

*Related Courses in Other Fields:*

Social Psychology (See Sociology or Psychology Announcements)

SA 35, Culture and Personality

SA 60, Social Anthropology

Psych. 6, Memory and Thinking

Psych. 8a, Aesthetics: Psychology of Art

Psych. 11, Physiological Psychology of the Senses

Psych. 14, Contemporary Psychology

Psych. 15, Psychology of the Abnormal

Psychobiology 30, Experimental Psychophysiology

Psychobiology 30a, Psychosomatic Problems and Theory

Psychobiology 31, Endocrinology and Behavior

Zool. 30, Heredity and Eugenics

Zool. 225, Comparative Neurology

Zool. 226, Cerebral Mechanisms

FL 130, Experience with Children

FL 140, Creative Materials in Child Development

FL 150, Children's Literature

FL 210, 340, 410, Principles of Child Guidance

FL 260, 460, Family Relationships and Personality Development

FL 270, 470, Marriage

FL 330, Participation in Nursery School

FL 350, Seminar in Child Guidance

FL 400, The Home and Family Life

FL 405, Elementary Methods and Techniques of Research in Child Development and Family Life

Sociology 10, The Family

Sociology 21, Criminology

Plant Breeding 101, Genetics

Rural Sociology 124, 215, Social Case Work I, II

**ELEMENTARY**

**EDUCATION** Cornell offers graduate work of special interest to advanced students of elementary education. Provisions are made for programs of study appropriate for prospective teachers

of elementary education in teachers colleges, master teachers in elementary schools, and specialists in elementary education for state, county and city school systems. Each candidate will be assisted in planning his program according to his interests and purposes. The following courses merely suggest areas of possible interest.

*Principal Courses in Education:*

18	202	213	266
107a	209	227	276
117	212	228	300
127			

*Related Courses in Education:*

7	129	253	265
8	218	253a	294a
13	241	262c	294b
16	251	263	295
17			

*Related Courses in Other Fields:*

The advanced student in elementary education may well consider certain offerings in the departments or divisions of the University listed below. The graduate student is encouraged to tap any of the resources of the University which will contribute to the development, enrichment, and integration of his program.

Botany	Foods and Nutrition
English	History
Entomology	Music
Fine Arts	Ornithology
Geology and Geography	Philosophy
Speech and Drama	Psychology
Zoology	Sociology
	Family Life

GUIDANCE AND

PERSONNEL MANAGEMENT

The courses offered in this field are designed to provide (1) an understanding of the basic principles in psychology, education, sociology and economics, which bear on the nature of guidance and personnel management; (2) to give a clear idea of the tools used by the professional workers in this field; and (3) to orient the student with respect to professional opportunities. The State requirements for a guidance certificate may be met by a proper selection of the courses listed below, including those which are marked with an asterisk. Personnel courses should be selected with the advice of persons teaching the courses and in the light of the specific area in which one desires to do professional work.

*Principal Courses in Education:*

*17	251	*283	300
*217	*282	*284	

*Related Courses in Education and Hotel Administration:*

18	261a	H.A. 114	H.A. 219
25	263	H.A. 119	H.A. 246
253	281		

*Related Courses in Other Fields:*

*Econ. 41	Labor Conditions and Problems
Econ. 42	Trade Unionism and Collective Bargaining
Econ. 44	Public Policy and Industrial Relations
Econ. 46	Legal and Constitutional Aspects of Labor Problems and Social Insurance
Psych. 50	Psychology of Inefficiency
Psych. 51	Psychotechnology in Business and Industry
Hyg. 8	Industrial Hygiene
*Hyg. 5	Mental Hygiene
Phys. Ed. 122	Community Recreation

## HIGHER EDUCATION

The School of Education offers an opportunity for a limited number of superior students to prepare themselves for college teaching and other positions of leadership in higher education. Such preparation usually involves work leading to the Ph.D. degree. The fields of preparation in which candidates may major for this degree are: Administration and Supervision, Agricultural Education, Educational Psychology, Elementary Education, Guidance and Personnel Administration, Home Economics Education, Industrial Education, Nature Study (including Conservation Education), Science Education, Secondary Education, and Social Studies Education.

Because so many different fields are involved, and because programs of preparation within a single field must be adjusted to meet the specific requirements of various types of positions, it is impossible to outline a single sequence of courses which is appropriate for all persons who wish to prepare themselves for positions in higher education.

It is impossible in this *Announcement* to suggest the variety of related courses which may be elected by students working toward the Ph.D. degree in Education. Such students normally carry two minors, one or both of which may be located outside the major field. Each candidate will wish to plan his program in consultation with his graduate committee. To appreciate the richness of offerings at

Cornell, the candidate should read carefully the Announcement of the Graduate School, and of the Colleges of Arts and Sciences, Agriculture and Home Economics.

#### HOME ECONOMICS

**EDUCATION** Curricula are planned for experienced persons who wish to qualify themselves further as (a) teachers in secondary schools, including those who wish to earn a permanent teaching certificate in New York State, (b) supervisors, (c) administrators, (d) extension workers, (e) college instructors.

##### *Principal Courses in Education:*

134b, 134c	248	269	300
235	249		

##### *Related Courses in Education:*

7	218	263	282
129	241	276	283
211a	249b	278	295
212	261a	281	300

##### *Related Courses in Home Economics:*

Economics of the Household and Household Management 130, 160, 310  
 Family Life 330, 340, 400, 410, 460, 470  
 Food and Nutrition 340, 400  
 Household Art 150, 160, 200, 220, 240, 400  
 Textiles and Clothing 200, 210, 310, 320, 430

##### *Related Courses in Other Fields:*

Econ. 1	Modern Economic Society
Ext. Teaching 15	Elements of Journalism
Ext. Teaching 102	Oral and Written Expression
Ext. Teaching 103	Extension Organization, Administration, and Policy
Ext. Teaching 110	Agricultural Radio Broadcasting
Ext. Teaching 120	Publicity and Advertising
Govt. 1	American National Government
Govt. 9	Introduction to International Relationships
History of Art 1a and 1b	History of Art, of Painting and Sculpture
R. Soc. 211	The Rural Community
R. Soc. 212	Rural Sociology
Philos. 39	Seminar in Contemporary Philosophy
Soc. 10	The Family
Soc. 20	Social Pathology



## INDUSTRIAL AND

## TECHNICAL EDUCATION

Permanent certification for administrators, supervisors, and technical, subject teachers in New York State requires thirty hours of graduate work. Persons with appropriate undergraduate training who desire to prepare themselves for positions as teachers of technical subjects, supervisors of industrial and technical programs, administrative assistants and principals in vocational, industrial, and technical schools and in technical institutes, and city directors of vocational education, will find general and specialized courses suited to their needs in the list shown below. Courses 143a, 243, 243a and 246 are designed to meet the special requirements for administrative and supervisory licenses in the industrial and technical education field.

*Principal courses in Education:*

143a	243a	263	300
194	246	265	
243	261a	276	

*Related Courses in Education:*

7	212	251	282
194	217	253	283

*Related Courses in Other Fields:*

H. A. 119	Personnel Administration
Econ. 41	Labor Conditions and Problems
Econ. 42	Trade Unionism and Collective Bargaining
Eng. 3A21	Economic Organization
Eng. 3A23	Business and Industrial Management
Eng. 3A35	Industrial Organization and Management
Eng. 3A42	Personnel Management in Industry
Eng. 3A49	Industrial Relations

Attention is directed also to the various technical offerings in special fields of engineering for technical teachers who may wish to supplement their technological background. See *Announcement of the College of Engineering*.

## MEASUREMENT AND

## STATISTICS

The teacher, supervisor, guidance and personnel worker, and administrator all have frequent occasion to use measurements of various kinds. The data secured through the use of instruments of measurement must be systematically arranged, interpreted statistically and often presented in graphical form for better understanding by boards and by the public. The offerings in this field are planned to meet the needs of such students. The school psychologist, the guidance and personnel worker, and the research worker need more training in this field than the teacher.

*Principal Courses in Education:*

7	217	253	300
8	251	253a	

*Related Courses in Other Fields:*

The following courses in Mathematics are not required but they are advised for the student who specializes in the statistical aspects of measurement:

Math 30	Mathematics for Students of Economics and Statistics
Math. 400	Statistics

## NATURE STUDY, SCIENCE EDUCATION

## AND CONSERVATION EDUCATION

In Nature Study, Science Education, and Conservation Education, opportunities are provided for qualifying suitable students for existing responsible positions in elementary and secondary schools, in junior colleges, teachers colleges and universities, and for outstanding leadership in official capacities in state and federal departments and in non-professional areas. Courses are offered in the teaching of subjects appropriate in these fields and in the teaching and literature of the area. Graduate work as a major or as a minor usually presupposes an adequate background in the physical and in the biological sciences. Cornell has a rich tradition and unusual offerings in courses in astronomy, botany, chemistry, entomology, limnology, ornithology, physics and the applied sciences in agriculture, wildlife management, engineering, nutrition, and home economics.

*Principal Courses in Education:*

106	108	202	209
107a	127	205	226

Special courses are offered in summer in Teaching Natural History in the Field, A 128, and in teaching science in different areas.

*Related Courses in Education:*

211	241	263	294a
212	251	276	
220	261a	281	

*Related Courses in Other Fields:*

Such courses are chosen mostly from:

Astronomy	Genetics	Ornithology
Bacteriology	Geology	Paleontology
Botany	Limnology	Physics
Chemistry	Meteorology	Soils
Entomology	Nutrition	Zoology

## SECONDARY EDUCATION

Education on the secondary school levels with its problems of organization, curriculum, functions, and relations with other levels of education is replete with challenges for trained leadership in those areas. With the appropriate undergraduate preparation the courses listed below should help persons to fit themselves for such positions as: college teachers of secondary education, master teachers, principals, and supervisors. Those continuing their study in the teaching of the several fields of instruction will find the appropriate subject-matter course offerings in the *Announcement of the Graduate School* and the *Announcements* of the several colleges.

*Principal Courses in Education:*

18	251	281	300
20	276	282	

*Those qualifying for principalships usually take:*

261a	263	268	278
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*Related Courses in Education:*

7	212	253	266
127	217	262a	294a
194	234	262c	295
211a	246	265	

*Related Courses in Other Fields:*

See list of courses in Agricultural Economics, Government, Rural Sociology and Sociology, given under Administration and Supervision above.

### PRE-PROFESSIONAL AND PROFESSIONAL COURSES FOR SECONDARY SCHOOL TEACHERS

Students planning to teach should consult with official advisers as follows:

Academic Subjects except Science:

Associate Professor M. L. Hulse, 251 Goldwin Smith

Agriculture:

Professor R. M. Stewart, 205 Stone

Art:

Associate Professor J. A. Hartell, 303 White

Home Economics:

Professor Cora E. Binzel, 209 Stone

Industrial Education:

Professor L. A. Emerson, Sibley Dome

Science:

Assistant Professor P. G. Johnson, 16 Fernow

# Announcement of Courses for 1944-45

## I. PRE-PROFESSIONAL AND PROFESSIONAL COURSES FOR SECONDARY SCHOOL TEACHERS

A, B. *Introduction to Social Science*. Fall or spring term. Credit three hours a term. Open to freshmen. Course A is a prerequisite to course B. Associate Professor HULSE, Professor FREEMAN, Mr. NOLAND. M W F 10, 12; T Th S 11. Rooms to be announced. Fee for material furnished, \$2 each term.

Students should apply for assignment to sections at Barton Hall.

A, B. *Human Growth and Development*. Fall and spring terms. Not open to freshmen. Credit three hours a term. *Prerequisite*, a laboratory science, preferably general biology or zoology. Course A (fall term) is *prerequisite* to Course B (spring term). Professors FREEMAN and PAPEZ and assistants. (In cooperation with the College of Arts and Sciences.) Fee, \$1 each term.

### Fall Term:

Course B. Professor FREEMAN. Lectures, T Th 11. Recitations, S 11 and another hour to be arranged. *Goldwin Smith A*.

### Spring Term:

Course A. Professor PAPEZ. Lectures, T Th 10. Recitations, S 10 and another hour to be arranged. *Goldwin Smith C*.

100. *Educational Psychology*. (Ed. and R.E.) Fall or spring term. Credit three hours. Prerequisite, Human Growth and Development. Not open to freshmen.

### Fall Term:

100a. Lectures, M W F 8. Mr. WOODRUFF. *Plant Science* 141.

\*100b. Lectures, M W F 11. Professor FREEMAN. *Goldwin Smith* 236.

### Spring Term:

100. Lectures, M W F 9. Mr. WOODRUFF. *Warren* 125.

\*100b. Lectures, M W F 11. Mrs. RIEMER. *Goldwin Smith* 236.

All students enrolling in this course are to report at Goldwin Smith 251 on registration day for assignment to sections.

Consideration of the outstanding facts and principles of psychology bearing upon the problems of education.

120. *Social Foundations of Education*. (Ed. and R.E.) Fall or spring term. Credit three hours. Fall term, Professor MOORE. M W F 9. *Warren* 240. Spring term, Professor ANDERSON. T Th S 11. *Boardman* 121.

Students will need to consult the instructor before registering.

Those who take this course with Professor Moore should list it on their study cards as 120a; those who take it with Associate Professor Anderson

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\*Does not count as an agricultural elective for students in the College of Agriculture.



should list it as course 120b. For students in the College of Agriculture 120b does not count as an agricultural elective. Fee, \$1 a term.

130. *The Art of Teaching*. (Ed. and R.E.) Fall and spring terms. Credit five hours a term. Prerequisite, Educational Psychology and Social Foundations of Education. Open only to selected seniors preparing to teach academic subjects. Associate Professor HULSE, Professor ANDERSON, Assistant Professor JOHNSON, Dr. GROMMON, Miss WELCH, and assistants. Fall term, T Th 11. *Goldwin Smith* 227. Spring term, M 4. *Goldwin Smith* 227. Joint meeting with students of agriculture and home economics, fall term, alternate Wednesdays, 4:15-5:30. Other hours to be arranged.

Distribution of credit: General Method and Extra-Instructional Problems, three hours; Special Method, three hours; Observation and Participation, one hour (25 clock hours); Student Teaching, three hours (75 clock hours).

130a. *The Art of Teaching*. (Ed. and R.E.) Fall or spring term. Credit five to ten hours. Prerequisite, Educational Psychology and Social Foundations of Education or equivalent. Open only to selected fifth-year students.

Generally the equivalent of Ed. 130. The undergraduate preparation of the student will determine the nature and amount of work required in this area.

130b. *The Art of Teaching*. (R.E.). Fall and spring terms. To be taken in two successive terms. Credit two hours the first term the student is registered and eight hours the second term the student is registered. Open to juniors and seniors who are preparing to teach home economics in the public schools. Professor BINZEL, Associate Professor HUTCHINS, Miss HASTIE, Mrs. ELLIOTT, and cooperating teachers.

Field work one half day each week and general conference, Saturday 9-11 during the first term the student is registered in this course. *Van Rensselaer* 121. Directed teaching for seven and one-half weeks, and general conference, Saturday 10-1, throughout the second term of such registration. *Van Rensselaer* 121. During the second term, the student will register for only one other course, Home Economics 300, *Homemaking Apartments*. Students will live in the Apartments for seven and one-half weeks and in the communities in which they teach for seven and one-half weeks.

Fee, \$20 including transportation.

131. *Introduction to Teaching in Vocational Agriculture*. (R.E.) Spring term. Credit three hours. Must be preceded or accompanied by an approved course in educational psychology. Open by permission only to students whose practical experience and grades are satisfactory and whose progress in the prescribed courses in technical agriculture is adequate. Associate Professor SMITH. Lectures, T Th 11. *Warren* 140. Laboratory, M 1:40-4. *Plant Science* 37.

Consideration of the organization of programs of instruction in vocational agriculture and of the problems involved in conducting a program. Observation in departments of vocational agriculture in typical schools. Preparation for course 132. Laboratory fee, \$3.

132a. *The Teaching of Agriculture in the Secondary School*. Fall and spring terms. Credit four hours during the fall term; three hours during the spring term. Open to juniors and seniors who have completed an approved course in educational psychology and Course 131, whose farm experience is ade-

quate, and who have permission to register. Associate Professor HOSKINS. T Th 9. *Warren 201*. Laboratories to be arranged.

Joint meetings are held with students of home economics and academic subjects in the fall term on alternate Wednesdays, 4-5:40.

The problems of teaching based upon the planning for and participation in teaching. Opportunity for experience is provided through organizing course materials, listing appropriate equipment for departments, and through planning programs for special groups. Laboratory fee, \$5 a term.

[132b. *The Teaching of Agriculture in the Secondary School*. Spring and fall terms. Credit three hours, spring term; four hours, fall term. T Th 10. Associate Professor OLNEY. *Warren 201*. Laboratories to be arranged. Not given in 1944-45.]

200. *Apprentice Teaching*. (Ed. and R.E.) An eight-week period off campus to be arranged. Credit six hours. Members of the staff. Required of all candidates for the M.Ed. degree. Prerequisite: satisfactory completion of the first four years of the five-year program, or the equivalent, or special permission.

Students are assigned to cooperating schools so selected as to provide the most favorable conditions for this type of experience. They are expected to carry a half-time teaching program including the usual related responsibilities of the teacher. Preparation for teaching and work on special problems under the direction of University instructors occupy the remainder of the student's time. Each student is under the immediate supervision of the principal, of a competent local teacher, and of a member of the staff of the School of Education.

210. *Special Problem in Teaching*. (R.E. and Ed.) Fall or spring term. Credit two hours. Members of the staff.

A critical study of some phase of teaching undertaken during the period of apprentice teaching.

220. *Philosophy of Education*. (Ed. and R.E.) Credit two hours. Offered for an eight-week period during the spring term at such time as will not interfere with the student's apprentice teaching. Time and place of meeting to be arranged. Associate Professor HULSE.

## II. OTHER PROFESSIONAL COURSES

Ed. 7. *Mental Measurements*. Fall term. Credit three hours. Prerequisite, a course in general or educational psychology or Human Growth and Development. Professor FREEMAN. T Th S 9. *Goldwin Smith 234*.

Development of individual and group tests of intelligence and personality; principles underlying their construction and use; their use in schools, psychological clinics, the armed services, and in other fields. The nature of mental abilities. Use of educational tests. Demonstrations in administering and interpreting tests.

Ed. 8. *Experimental Educational Psychology*. Fall term. Credit and hours to be arranged. Consent of the instructor is required. Education 7 or its equivalent should normally precede this course. Professor FREEMAN.

The application of psychological and statistical methods to problems in education.

Ed. 18. *Individual Differences*. Spring term. Credit three hours. Prerequisite, a course in general or educational psychology. It is desirable, though not required, that Education 7 precede this course. Mrs. RIEMER. T Th 2-3:15. *Goldwin Smith* 248.

The nature, causes, and implications of individual differences in abilities and behavior. Study and observation of atypical groups.

[Ed. 20. *Seminar in Human Development and Behavior*. Fall term. Credit two hours. Primarily for graduate students. Seniors may be admitted with permission of the instructor. Professor FREEMAN. Not given in 1944-45.]

Ed. 25. *Procedures in Clinical Child Guidance*. Fall term. Credit three hours. Primarily for graduate students; a limited number of qualified seniors may be admitted. All students must have consent of the instructor. Professor FREEMAN. Th 4-6 and conferences. *Goldwin Smith* 248.

Procedures and instruments used in case studies of psycho-educational problems of learning and adjustment. Study of case materials. Participation in making actual case studies of pupils.

R.E. 31. *Planning for Teaching in Agriculture*. Fall term. Without credit. Open to sophomores who are planning or who may plan to teach agriculture in the public schools. Associate Professor SMITH. Th 10. *Warren* 140.

Consideration of the problems leading to the choice of agricultural education as a field of preparation.

R.E. 106. *Outdoor Living*. Spring term. Credit two hours. Sat. 9-12:30, with two overnight trips. Professor PALMER and Miss GORDON. *Fernow* 8. Laboratory fee, \$5.

A study of outdoor living, with practice in understanding the terrain, methods of camping and hiking, means of survival. Laboratory fee, \$5.

R.E. 107a. *The Teaching of Nature Study and Elementary School Science*. Fall term. Credit two hours. Open to juniors, seniors, and graduate students. Professor PALMER and Miss GORDON. Lecture, Th 8. Practical exercises, Th 1:40-4. *Fernow* 8. Laboratory fee, \$1.50.

The content and methods of nature study and of elementary school science, with field work and laboratory experience useful in classroom and camp. For those preparing to teach or supervise science. Laboratory fee, \$1.50.

R.E. 108. *Field Natural History*. Fall term. Credit two hours. Lecture, Th 4. Field work, Th 1:40-4. Professor PALMER and Miss GORDON. *Fernow* 8. Fee, \$1.

Field trips and lectures devoted to a study of the natural history of five ecological units under different seasonal conditions, with special emphasis on their contributions to the teaching of science. Laboratory fee, \$1.

R.E. 110. *Psychology: An Introductory Course*. Fall or spring term. Credit three hours. Not open to freshmen. Professor WINSOR. M W F 10. *Goldwin Smith* C. Fee, \$1.

R.E. 112. *Psychology for Students of Education*. Fall or spring term. Credit three hours. Prerequisite, R.E. 110, Psychology 1, Human Growth and Development or the equivalent. Open to second-term sophomores, juniors, and

seniors. Professor KRUSE and Assistant Professor BAYNE. Fall term, M W F 9. Spring term, M W F 10. *Warren* 125. Fee, \$1.

*Psychology for Students of Hotel Administration.* (Hotel Administration 114.) Fall term. Credit three hours. Not open to freshmen. Professor WINSOR. M W F 8. *Warren* 225.

A study of the methods and problems of general psychology.

R.E. 117. *Psychology of Childhood and Adolescence.* Fall or spring term. Credit three hours. Prerequisite, a course in educational psychology. Mr. WOODRUFF. M W F 10. *Roberts* 392. Fee \$1.

*Personnel Administration.* (Hotel Administration 119.) Spring term. Credit three hours. Prerequisite, Hotel Administration 114 or R.E. 110. Professor WINSOR. Lectures, M W F 8. *Plant Science* 233.

A study of the problems of human relations in industry. The methods and principles of recruitment, selection, placement, maintenance, organization, and government of employees are analyzed with particular reference to industry and business.

R.E. 121. *Method and Procedure in Secondary School Teaching.* Fall term. Credit three hours. Prerequisite, course 100, 112 or the equivalent. Open to juniors and seniors. Professor FERRISS. Lectures, M W F 11. *Plant Science* 37.

The development of certain principles of teaching in secondary schools, and their applications to practical problems of teaching, such as objectives, selecting and organizing teaching materials, making the assignment, directing study, and so forth.

R.E. 127. *Visual and Auditory Aids in Teaching.* Spring term. Credit two hours. Assistant Professor JOHNSON. Lecture, Th 1:40-2:30; laboratory, Th 2:30-5. *Fernow* 8.

R.E. 133. *Directed Teaching of Students in Agricultural Education.* Fall or spring term. Credit to be arranged. Registration by permission. Staff in Agricultural Education.

R.E. 134b. *Adult Homemaking Education: Organizations and Policies.* Spring term. Credit three hours. Should precede course 134c. Miss ————. Discussions, M W F 11. Field trips and individual conferences to be arranged. *Martha Van Rensselaer* 3M13. Estimated cost of trips, \$8. Fee, \$5.

R.E. 134c. *Adult Homemaking Education: Program Planning and Methods.* Fall and spring terms. Credit three hours. Open to students who have had course 134b or comparable experience. Miss ————. Discussion, S 11:30-1. Field trips and individual conferences to be arranged. *Martha Van Rensselaer* 124. Estimated expenses for field work, \$2 to \$5. Fee for two hours, \$4; for three hours, \$5.

R.E. 143a. *Curriculum Building in Industrial and Technical Education.* Fall term. Credit two hours. Professor EMERSON. Th 4-5:45. Curriculum Laboratory, Sibley Dome Basement.

[R.E. 143b. *Development of Instructional Material in Industrial and Technical Education.* Credit two hours. Professor EMERSON. Not offered in 1944-45.]

[R.E. 194. *Principles of Vocational Education.* Fall term. Credit three hours. Professor ————. Not given in 1944-45.]



B199. *Informal Study in Education*. Maximum credit, three hours each term. Members of the staff.

This privilege may be granted to a qualified student of junior rank or above, with the approval of his adviser and the consent of the appropriate member of the Education staff.

R.E. 205. *The Teaching of Conservation*. Spring term. Credit two hours. Undergraduate and graduate. TTh9. Professor PALMER and Miss GORDON. Fernow 8.

Consideration of the principles, materials, and methods of conservation education useful to teachers and others engaged in teaching of the wise use of the resources of the nation.

R.E. 211a. *Psychology for Students of Education*. Fall term. Credit three hours. For mature students with teaching experience. Professor KRUSE. M F 11-12:20. Stone 309.

R.E. 212. *Psychology of Learning*. Spring term. Credit two hours. Professor KRUSE. Th 4:00-5:45. Stone 309.

[R.E. 213. *Psychology of Learning in the School Subjects*. Fall term. Credit two hours. Assistant Professor BAYNE. Not given in 1944-45.]

R.E. 217. *Use and Interpretation of Tests in Guidance and Personnel Administration*. Fall term. Credit two hours. Open to students in guidance and personnel administration. Th 4-6. Professor WINSOR. Warren 240.

This course deals with the development, use, and interpretation of aptitude tests as a basis for guidance and selection.

[R.E. 218. *Seminar in Educational Psychology*. Spring term. Credit two hours. Professor KRUSE. Not given in 1944-45.]

*Seminar in Personnel Administration*. (Hotel Administration 219.) Spring term. Credit two hours. Prerequisite, course 119. Open to qualified seniors and graduate students. Professor WINSOR. Th 4:15-6. Warren 340.

R.E. 226. *Research in Science Teaching*. Fall or spring term. Credit one hour a term. Hours to be arranged. Professor PALMER and Assistant Professor JOHNSON. Fernow 8.

Special problems in science teaching.

R.E. 227. *Seminar in Elementary Education*. Spring term. Credit two hours. Professor MOORE. S 9-10:40. East Roberts 223.

R.E. 228. *Seminar in Child Guidance* (Family Life 350). Spring term. Credit two hours. For graduate students who have had some child guidance. F 4-6. Martha Van Rensselaer G-58. Professor WARING.

Ed. 230. *Seminar in Social Studies Education*. Fall or spring term. Credit as arranged. Professor ANDERSON. M 4:15. Boardman M213.

Students working on critical papers, theses, or other research in the field may register for this course.

R.E. 232. *Advanced Problems of Teaching in Vocational Agriculture*. Spring term. Credit two hours. For seniors and graduate students in vocational education; for others by permission. Hours to be arranged. Associate Professor HOSKINS.

R.E. 234. *Seminar*. Spring term. Credit two hours. Open to graduate

students contemplating research in education, and who have permission to register. Associate Professor W. A. SMITH. W 2-4. Warren 140.

A consideration of scientific method applied in education through graduate studies and other educational research.

R.E. 235. *Seminar in Teaching Home Economics*. Spring term. Credit two hours. Students will need to consult the instructor before registering. Professor THURSTON. Hours to be arranged. It is especially recommended in connection with courses R.E. 248, R.E. 249, and R.E. 269.

This course provides opportunity for graduate study of methods in home economics education and for field work. It is intended for secondary school teachers, extension workers, college teachers, supervisors, those who prepare teachers, and other leaders in home economics. Individual problems may include experiments, observation, and practice in teaching and supervision. It is especially recommended in connection with courses 248, 249, and 269.

[R.E. 241. *The Preparation of Teachers in Normal Schools and Colleges*. Spring term. Credit two hours. Professor MOORE. Not given in 1944-45.]

R.E. 243. *Administration of Industrial and Technical Education*. Fall term. Credit two hours. Professor L. A. EMERSON. T 4-5:45. Curriculum Laboratory, Sibley Dome Basement.

R.E. 243a. *Supervision of Industrial and Technical Education*. Spring term. Credit two hours. Professor L. A. EMERSON. T 4-5:45. Curriculum Laboratory, Sibley Dome Basement.

R.E. 245. *The Technical and Professional Preparation of Teachers of Agriculture*. Spring term. Credit three hours. Should follow course 211a or its equivalent. T Th 11-12:30. Professor STEWART. Warren 140.

A course designed to study critically in the light of the teaching of agriculture in secondary schools the programs of teacher education in the colleges of agriculture.

R.E. 246. *Seminar in Industrial and Technical Education*. Spring term. Credit two hours. Professor L. A. EMERSON. Th 4-5:45. Curriculum Laboratory, Sibley Dome Basement.

[R.E. 248. *The Preparation of Teachers of Home Economics for Secondary Schools*. Spring term. Credit two hours. Professor THURSTON. Not given in 1944-45.]

R.E. 249. *Seminar in Home Economics Education*. Fall and spring terms. Credit two to four hours either term. Total credit for the year not to exceed six hours. Students will need to consult instructor before registering. Professor THURSTON. S 10-12 and hours to be arranged. Field work will be required.

Designed to meet the needs of graduate students who have had experience as home economics educators in schools, colleges, extension service, business, etc. Arrangements will be made for students to work on their individual problems. Courses in philosophy and principles of education, psychology, guidance, curriculum, and measurement are recommended as prerequisites or parallel.

R.E. 250. *Seminar in Agricultural Education*. Fall term. Credit two hours. For students whose progress in graduate study is satisfactory. Professor STEWART. T 4:00-5:30. Stone 309.

R.E. 251. *Educational Measurement*. Spring term. Credit three hours. Candidates for the principal's certificate may register for two hours credit. Prerequisite, a course in educational psychology. Assistant Professor BAYNE. S 11-12:30 and an additional hour to be arranged. *Roberts* 492.

The use of aptitude and achievement tests and other measuring instruments in the classification and guidance of pupils, improvement of instruction, and other activities of the teacher and school officer. Those class members who wish may make a study of their own aptitude and achievements.

R.E. 253. *Introduction to Educational Statistics*. Fall term. Credit three hours. Assistant Professor BAYNE. T Th 10 and an hour to be arranged. *Stone* 309.

A study of common statistical procedure in relation to critical reading of technical studies, research, and writing reports of studies. As far as possible the work is related to the problems of the individual student.

R.E. 253a. *Statistical Instruments in Education*. Spring term. Credit two hours. Prerequisite, a first course in statistics and permission of the instructor. Assistant Professor BAYNE. T 10. *Stone* 309.

R.E. 260a. *Organization and Administration of the Secondary School*. Fall term. Credit two hours. Professor FERRISS. M W 2. *Stone* 309.

A course in the organization and administration of the secondary school.

R.E. 261a. *Fundamentals of Educational Organization and Administration*. Fall term. Credit three hours. Professor BUTTERWORTH. T Th 11-12:30. *Stone* 309.

A consideration of the main problems in organizing and administering the school program including the services provided when school and community cooperate in meeting educational needs.

R.E. 262a. *School Finance*. Spring term. Credit two hours. Prerequisite, R.E. 261a or equivalent. Professor BUTTERWORTH. M W 11. *Stone* 309.

Typical problems: how local school funds are levied, collected, and disbursed; cost accounting; budget making; bonding; sources of state funds and their distribution. The discussion is based upon actual problems; prospective members of the class are urged, therefore, to bring with them financial data regarding their schools.

R.E. 262c. *The School Plant*. Spring term. Credit two hours. Prerequisite, R.E. 261a or equivalent. Professor BUTTERWORTH. S 11-12:30. *Stone* 309.

The planning and utilization of the school building to serve community needs.

R.E. 263. *Procedures and Techniques in Supervision*. Fall term. Credit three hours. Candidates for the principal's certificate may register for two hours credit. Professor MOORE. M W F 10. *Stone* 309.

Designed for superintendents, supervisors, and principals. Students taking this course must be prepared to spend four full days or more in observing supervisory procedures in various school systems.

R.E. 264. *Seminar in Rural School Administration*. Spring term. Credit two hours. Professor BUTTERWORTH. T 4:15-5:45. *Stone* 309.

Topic to be announced.

R.E. 265. *Seminar for Principals*. Fall term. Credit two hours. Required of all graduate students who are candidates for a principal's certificate. Professor MOORE. S 9-10. *Stone* 309.

R.E. 266. *The Supervision of the Elementary School*. Spring term. Credit three hours. Candidates for a principal's certificate may register for two hours credit. Professor MOORE. M W F 9. *Stone* 309.

A course designed for supervisors, elementary school principals, and superintendents.

[R.E. 267. *The Organization and Administration of Vocational Agriculture in the Public Schools*. Spring term. Credit three hours. Should follow or accompany Course 261, or its equivalent. Professor STEWART. Not given in 1944-45.]

R.E. 267b. *The Supervision of Vocational Agriculture in the Secondary School*. Fall term. Credit two hours. Open to teachers, supervisors, principals, district superintendents and other educational leaders responsible for supervision in this field. Associate Professor SMITH. S 10-12. *Plant Science* 143.

A consideration of the supervisory and professional improvement needs of teachers of vocational agriculture and the procedures and techniques to supervision.

R.E. 268. *Seminar in Rural Educational Leadership*. Fall term. Credit three hours. Professors BUTTERWORTH, FERRISS, and others. M W 3:30-5. *Stone* 309.

A consideration of problems especially significant in the rural areas. Planned for superintendents, principals, extension specialists, social workers, and others preparing for leadership responsibilities in rural education.

R.E. 269. *The Supervision of Home Economics Education*. Spring term. Credit two hours. Professor THURSTON. Time to be arranged. Students must consult the instructor before registering. Field work will be required.

For persons who are now engaged in supervision and in the education of teachers in service and for those who wish to prepare for such work.

R.E. 276. *Principles of Curriculum Building*. Fall term. Credit three or four hours. Primarily for graduate students. Professor FERRISS. T Th 2-3:30, and an additional hour to be arranged for those who wish to carry further the study of special curriculum problems. *Stone* 309.

A consideration of major problems, principles, and techniques in determining educational objectives and curriculum content and organization in elementary and secondary schools in the light of modern theory and practice.

[R.E. 277. *Courses of Study in Vocational Agriculture*. Spring term. Credit two hours. Associate Professor HOSKINS. Not given in 1944-45.]

[R.E. 278. *Seminar in Rural Secondary Education*. Spring term. Credit two hours. Professor FERRISS. Not given in 1944-45.]

R.E. 281. *Rural Secondary Education*. Fall term. Credit three hours. Primarily for graduate students. Professor FERRISS. M W F 9. *Stone* 309.

A consideration of some of the more basic problems in the functions, nature, organization, curriculum, and extension of secondary education in its adaptations to rural and village needs and conditions.

R.E. 282. *Educational and Vocational Guidance*. Fall term. Credit two hours.



Mr. PALMER. W 4-6. *Warren* 140. Planned primarily for graduate students but a small number of undergraduates with a background of experience may be admitted upon permission of the instructor.

This is an information course. It is designed to familiarize students with (1) the history, principles, and place of guidance in a democratic society, (2) methods of collecting, classifying, interpreting, and disseminating various types of information essential to a successful guidance program (educational, occupational, community, etc.), (3) placement procedures and employment supervision.

R.E. 283. *Counseling Methods*. Spring term. Credit two hours. Planned primarily for graduate students. Mr. PALMER. W 4-6. *Warren* 140.

The following techniques used in the collection and interpretation of information pertinent to counseling will be considered: interviews, observation, records, reports, case studies, and conferences.

R.E. 290. *Interdepartmental Seminar on Rural Reconstruction in Various Countries*. Spring term. Credit two hours. M 2-3:30. *Warren* 302. Professor R. M. STEWART, chairman, and members of the staffs of the following departments cooperating: Agricultural Economics, Home Economics, Hygiene and Preventive Medicine, Rural Education, and Rural Sociology.

Consideration of such social, economic, educational, and related problems as affect individual and community development.

[R.E. 293. *Seminar in the Social and Economic Problems of the School Administrator*. Spring term. Credit three hours. Professor BUTTERWORTH and others Not given in 1944-45.]

[R.E. 294a. *The Evolution of Educational Theory*. Fall term. Credit three hours. Professor ————. Not given in 1944-45.]

[R.E. 294b. *Theory of Values in Education*. Spring term. Credit two hours. Professor ————. Not given in 1944-45.]

R.E. 294c. *Philosophy of Education*. Spring term. Credit two hours. W 4-5:40. Professor MOORE. *Warren* 201.

[R.E. 295. *Comparative Education*. Fall term. Credit two hours. Professors BUTTERWORTH, FERRISS, and MOORE. Not given in 1944-45.]

B. 300. *Special Studies*. Credit as arranged. Members of the staff.

Students working on theses or other research projects may register for this course. The staff members concerned must be consulted before registration.